

**REMARKS**

Applicants respectfully request reconsideration and withdrawal of the outstanding Office Action rejections in view of the foregoing amendments and following remarks. Claim 1 has been amended to include the limitations of claims 5 and 6, whereby claims 5 and 6 have been cancelled. Claim 12 has been amended to remove the phrase "any of." Claims 1, 13 and 20 have been amended to clarify that the water being referred to is the water already present in the mixture. Claim 24 has been amended to clarify that the alumina precursor is being compared to mole fractions of water. No new matter has been added.

Claims 1, 13, 20 and 24 stand rejected under 35 U.S.C. § 112, second paragraph. Applicants respectfully submit that the amendments to claims 1, 13, 20 and 24 now place the claims in condition to satisfy the requirements of 35 U.S.C. § 112, second paragraph. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

Claims 1-12 stand rejected under 35 U.S.C. 102(b) as being anticipated by Pinnavaia et al. (USP 5,795,559). Applicants respectfully submit that Pinnavaia does not disclose each and every element of the present claims 1-12 and, hence, cannot anticipate present claims 1-12.

Present claim 1 has been amended to include the limitations of claims 5 and 6, with subsequent cancellation of claims 5 and 6. Present claim 1 now requires the surfactant to be a cationic surfactant, and more specifically, a cationic ammonium surfactant.

Pinnavaia disclose a method for the preparation of mesoporous alumina molecular sieves using different types of nonionic polyethylene-oxide surfactants. Pinnavaia at column 18, line 40 - column 19, line 5, discloses polyethylene oxide (PEO)-polypropylene oxide (PPO) co-polymer surfactants for preparation of mesoporous alumina molecular sieves. Pinnavaia does not teach or suggest, however, a method for the preparation of mesoporous alumina molecular sieves using cationic surfactants or ammonium based surfactants, as now required by present claim 1. Therefore, Applicants respectfully submit that since Pinnavaia does not teach or suggest a cationic ammonium surfactant, Pinnavaia cannot anticipate present claims 1-12.

Claims 13-33 stand rejected under 35 U.S.C. § 102(b) as being anticipated by the article: "Surfactant Driven Synthesis of Individual Alumina Nanotubes and Bundles of Lithium Aluminate Subnanotubes with High Hydrogen Storage Capacity and Lithium Ion Mobility" *Symposium for Nano Chemical Processing*, published June 20, 2002.

Applicants respectfully submit that the outstanding 35 U.S.C. § 102(b) rejection is improper for at least the following reasons. The document used in this rejection was published on June 20, 2002. The present application is a national phase entry of corresponding PCT application PCT/KR02/01951, which was filed on October 18, 2002. A filing date of October 18, 2002 is approximately 5 months after the June 20, 2002 publication date of the article: "Surfactant Driven Synthesis of Individual Alumina Nanotubes and Bundles of Lithium Aluminate Subnanotubes with High Hydrogen Storage Capacity and Lithium Ion Mobility." Since this article has five common inventors with the present application, Applicants respectfully submit that the present rejection should be, at best, a 35 U.S.C. § 102(a) rejection.

Applicants hereby submit a Katz declaration signed by the five co-inventors of the subject matter of the present application stating that the only author of the above-identified article who is not a co-inventor of the present application is Hee Chon Lee, and that he did not make an inventive contribution to the relevant subject matter of the article. The declaration serves to disqualify this document from being applied against the present claims.

Accordingly, Applicants respectfully submit that the article: "Surfactant Driven Synthesis of Individual Alumina Nanotubes and Bundles of Lithium Aluminate Subnanotubes with High Hydrogen Storage Capacity and Lithium Ion Mobility" *Symposium for Nano Chemical Processing*, published June 20, 2002, does not qualify as either 35 U.S.C. § 102(b) prior art or as 35 U.S.C. § 102(a) prior art. Applicants respectfully request withdrawal of this outstanding rejection.

Claims 13-33 stand rejected under 35 U.S.C. § 102(b) as being anticipated by the article entitled "Surfactant Driven Synthesis of Pure and Lithium Inseted Alumina Nanotubes," which has a publication date of April 19, 2002.

Applicants respectfully submit that the outstanding 35 U.S.C. § 102(b) rejection is improper for at least the following reasons. The document used in this rejection was published on April 19, 2002. The present application is a national phase entry of corresponding PCT application PCT/KR02/01951, which was filed on October 18, 2002. A filing date of October 18, 2002 is approximately 7 months after the June 20, 2002 publication date of the article: "Surfactant Driven Synthesis of Pure and Lithium Inseted Alumina Nanotubes." Since this article has five common inventors with the present

application, Applicants respectfully submit that the present rejection should be, at best, a 35 U.S.C. § 102(a) rejection.

Applicants hereby submit a Katz declaration signed by the five co-inventors of the subject matter of the present application stating that the only author of the above-identified article who is not a co-inventor of the present application is Hee Chon Lee, and that he did not make an inventive contribution to the relevant subject matter of the article. The declaration serves to disqualify this document from being applied against the present claims.

Accordingly, Applicants respectfully submit that the article "Surfactant Driven Synthesis of Pure and Lithium Inseted Alumina Nanotubes," which has a publication date of April 19, 2002, does not qualify as either 35 U.S.C. § 102(b) prior art or as 35 U.S.C. § 102(a) prior art. Applicants respectfully request withdrawal of this outstanding rejection.

Claims 13-33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the article entitled "Surfactant Driven Synthesis of Pure and Lithium Inseted Alumina Nanotubes," (publication date of April 19, 2002) in view of the article "Surfactant Driven Synthesis of Individual Alumina Nanotubes and Bundles of Lithium Aluminate Subnanotubes with High Hydrogen Storage Capacity and Lithium Ion Mobility" (publication date of June 20, 2002).

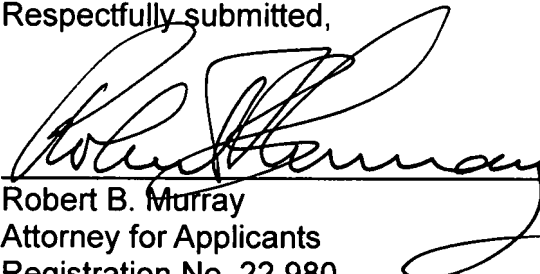
As stated above, Applicants have submitted two declarations signed by the five co-inventors of the subject matter of the present application. These declarations state that the only author of the above-identified articles who is not a co-inventor of the subject matter of the present application is Hee Chon Lee, and that he did not make an

inventive contribution to the relevant subject matter of the articles. Accordingly, Applicants respectfully submit that these two declarations serve to disqualify aforementioned articles from being applied against the present claims. Applicants respectfully request withdrawal of this Office Action rejection.

In view of the foregoing amendments, arguments and submitted declarations, Applicants respectfully request withdrawal of the outstanding Office Action rejections. Early and favorable action is awaited.

Respectfully submitted,

By

  
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/523,804  
Applicant : LEE et al.  
Filed : February 9, 2005  
TC/A.U. : 1754  
Examiner : Timothy C. Vanoy

Docket No. : 1751-373  
Customer No. : 06449  
Confirmation No. : 6175

DECLARATION

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Dear Sir:

We, Jae Sung Lee, Kyung Hee Lee, Hae Jin Kim, Hyun Chul Lee and Dae Hyun Choo, applicants for the above-identified patent application, declare as follows:

1. That we are co-inventors of the invention disclosed and claimed in the above-identified application.
2. That Jae Sung Lee, Kyung Hee Lee, Hae Jin Kim, Hyun Chul Lee and Dae Hyun Choo, along with Hee Cheon Lee are co-authors of the article entitled "Surfactant-Driven Synthesis of Individual Alumina Nanotubes and Bundles of Lithium Aluminate Subnanotubes with High Hydrogen Storage Capacity and Lithium Ion Mobility", which has a publication date of June 20, 2002.
3. That we, Jae Sung Lee, Kyung Hee Lee, Hae Jin Kim, Hyun Chul Lee and Dae Hyun Choo, are the co-inventors of the subject matter described in the publication.

4. That, while Hee Cheon Lee is a co-author of the above publication, Hee Cheon Lee is not a co-inventor of, and did not make an inventive contribution to, the subject matter described in the publication.

5. The declarants further state that the above statements were made with the knowledge that willful false statements and the like are punishable by fine and/or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that any such willful false statement may jeopardize the validity of this application or any patent resulting therefrom.

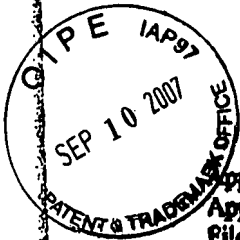
Dated: Aug 22, 2007Dated: Aug 22, 2007

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Jae Sung Lee  
Jae Sung LeeKyung Hee Lee  
Kyung Hee LeeHac Jin Kim  
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Hyun Chul LeeDas Hyun Choo  
Das Hyun Choo

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Dear Sir:

We, Jae Sung Lee, Kyung Hee Lee, Hae Jin Kim, Hyun Chul Lee and Dae Hyun Choo, applicants for the above-identified patent application, declare as follows:

1. That we are co-inventors of the invention disclosed and claimed in the above-identified application.
2. That Jae Sung Lee, Kyung Hee Lee, Hae Jin Kim, Hyun Chul Lee and Dae Hyun Choo, along with Hee Cheon Lee are co-authors of the article entitled "Surfactant Driven Synthesis of Pure and Lithium Inserted Alumina Nanotubes," which has a publication date of April 19, 2002.
3. That we, Jae Sung Lee, Kyung Hee Lee, Hae Jin Kim, Hyun Chul Lee and Dae Hyun Choo, are the co-inventors of the subject matter described in the publication.



4. That, while Hee Cheon Lee is a co-author of the above publication, Hee Cheon Lee is not a co-inventor of, and did not make an inventive contribution to, the subject matter described in the publication.

5. The declarants further state that the above statements were made with the knowledge that willful false statements and the like are punishable by fine and/or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that any such willful false statement may jeopardize the validity of this application or any patent resulting therefrom.

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Dated: \_\_\_\_\_

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